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LINKING KNOWLEDGE CREATION WITH EMPLOYEE ENGAGEMENT: A CONCEPTUAL MODEL

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Abstract

Employee engagement is increasingly important in this competitive society because organizational competitive advantage requires knowledge especially the tacit which resides in employees and this cannot be achieved unless employees are engaged in the process of knowledge creation. However, researches have rarely explored to bridge engaging employees with creating knowledge. This paper after reviewing relevant literatures on knowledge creation and employee engagement emphasized the essential linkage between knowledge creation and employee engagement. It is expected to enhance theory that knowledge creation link to employee engagement. Hopefully, the proposed model could help organizations to understand how employee engagement can be a key approach to achieve competitive advantage through knowledge creation.

Keywords: Knowledge Creation, Employee Engagement, Employee Learning, Intellectual Capital.

1 INTRODUCTION

Knowledge especially tacit, a source of competitive advantage, is considered as expertise, habit, skills, understanding about something that comes from employees' experience, organizational training or learning process, or someone's expertise acquired through ability and effort (Vine & Anita, 2015). Employees are the key holders of types of knowledge in an organization. To note, employee job satisfaction and commitment to serve at high level becomes crucial in today's business environment not only because of them related to high levels of productivities and profitability, but also because of competitiveness needs a "knowledge edge" and this cannot be reached unless employees are motivated to think up new and better ways to work (Pascoe, Ali, & Warne, 2002). Organizations that have high level of engagement, had reduced accidents and declined absenteeism as well as increased performance (Towers Watson, 2008). For instance, Gallup's (2002) report shown that organizations that invest in engagement can stand to grow their earning 2.6 times faster than

those who do not (Fleming, 2009). According to Brockman and Morgan (2003), knowledge creation is the key to a series of organizational processes assisting competitiveness, for instance the development of new products and the evolution of dynamic capability.

Rahimi, Arbabisarjou, Allameh and Aghababaei (2011) conducted a study on the relationship between knowledge management process (i.e. socialization process, combination process, externalization process and internalization process) and creativity (i.e. outcome of behavioral or cognitive engagement) among faculty workers in a university. It has been found that combination process has the significant contribution on creativity of faculty workers in the university. The impact level of the four knowledge management processes on faculty workers' creativity from highest to lowest is following: externalization, socialization and internalization. To Nonaka (1995), process of combination, externalization, socialization and internalization are processes of knowledge creation. Improved creativity reflects that employees are engaged either in feeling or behavioral. This pose a question of whether knowledge creation affects employee engagement. As for the knowledge of researcher, studies have rarely explored to bridge engaging employees with creating knowledge. Therefore, this paper aims to review the relevant literature on knowledge creation and employee engagement and to establish a model, which knowledge creation towards employee engagement.

The following sections of the current paper are organized as follows. Section 2 defines employee engagement and presents the dimensions of employee engagement. Section 3 provides definitions of knowledge creation. Finally, the linkage between knowledge creation and employee engagement is presented in Section 4 with a conceptual model concluded. Section 5 proposes the managerial suggestions and recommendations for future research.

2 EMPLOYEE ENGAGEMENT

2.1 Definition of Employee Engagement

Employee engagement has been drawn much attention since it has been recognized as a crucial for organizations to retain competitive advantage. Kahn (1990) defined employee engagement as – “the harnessing of organization members' selves to their work roles, where employees express themselves physically, cognitively and emotionally during role performances”. He point out three psychological states to determine whether employees are engaged or not at work, which are psychological meaningfulness, psychological safety and psychological availability. Buckingham and Coffman (1999) commented about engagement as “the right worker in the right roles with the right managers motivates employee engagement”. According to Hewitt Associates LIC (2004), employee engagement has been defined as emotional and intellectually commitment to the organization, as measured by three primary behaviours: say [...] stay [...] strives.”

Robinson, Perryman and Hayday (2004) argued that engagement is “...one step up from commitment”. It has been explained that, “...engagement involves a lot of parts of both commitment and organizational citizenship behaviour... neither employee commitment nor organizational citizenship behaviour can fully report the two features of engagement, its bidirectional character and the degree that motivated employees are expected to rationally aware of their role within the organization” (Robinson et al., 2004). Some researchers (i.e. Harter, Schmidt & Keyes, 2002) argued that employee engagement equals to employee motivation and job satisfaction. However, Crozier (2010) agreed that “employees can be satisfied without being engaged”. In this way, employee engagement was identified that it consists of both commitment and job satisfaction. This was supported by Heintzman and Marson (2005), who come up with employee engagement includes two related components, which are employee commitment and employee job satisfaction. Moreover, employee commitment is related to the pride people “feel for their organization and the degree that they intend to stay with the organization, positively recommend their organization to others, wish to perform at high levels, and try to enhance the organizational performance”; employee job satisfaction is referred to “the level of contentment that an employee assigns to their jobs and the overall way that they think about their employment” (Peters, 2007).

2.2 Dimensions of Employee Engagement

Definitions of employee engagement indicate that employees could be engaged not only in their feeling but also in their thinking and behaviour, and Kahn (1990) held that employees could be engaged in either one of the dimensions. Kahn (1990) proposed that engagement consists three dimensions; this reflects employees could be engaged emotionally, cognitively and physically. Similarly, the Chartered Institute of Personnel and Development (CIPD) point out that employee engagement is multiple-dimensional construct, and it includes emotional, physical and cognitive dimensions. Physical engagement refers to the physical expression of

engagement, it means that the real labour cost by employee to complete his or her tasks, including willingness to go the extra mile. Emotional engagement relates to employees who are emotionally connected to others. It indicates employees' feelings and attitudes towards their organization, colleagues and work conditions within the organization. Cognitive engagement refers to employees who align their role and mission with the organizations' goal.

Liu, Kee, Feng and Mohd (2015) concluded that employee engagement comprises three sub-dimension which are absorption, vigour and dedication. Bakker and Demerouti (2008) explained vigour as a state in which an individual perform their jobs with a high level of energy and a high level of mental resilience, this reflects that employee are engaged in believes aspect, as they are rationally align their goal with the organization's goal; dedication refers to employees have a high level of involvement in their job, which reflects employee are engaged in behavioural aspect; and absorption is a state of full concentration and a feeling of being absorbed by the work itself, and this reflects employees are engaged in feeling aspect. Furthermore, Ferguson (2005) proposed employee engagement consists of three dimensions, which are affective (employees feeling), behavioural (employees action) and cognitive (employees believe). Table 1 presents the summary of different types of employee engagement dimensions.

Based on the distinct dimensions that have been mentioned from various authors afore, the dimensions of employee engagement in this study unified as affective, behavioural and cognitive as shown in Fig. 1. Briefly, cognitive dimension refers to understanding of alignment by the employees between his/her work role and the organizational goals. Behavioural dimension refers to how employee's act and affective dimension refers to how employees feel.

Table 1. Types of Employee Engagement Dimensions

Dimensions	Kahn (1990)	Ferguson (2005)	Schaufeli & Salanova (2007)
Affective	Emotional: Employees are emotionally connected to others.	Affective: Employees' feeling towards their organization.	Absorption: A state of concentration and feeling.
Behaviour	Physical: Physical expression of engagement.	Behaviour: Employees' action	Dedication: High level of involvement.
Cognitive	Cognitive: Employees are aware of their goal within an organization.	Cognitive: Employees' believes	Vigor: High level of energy and mental resilience.

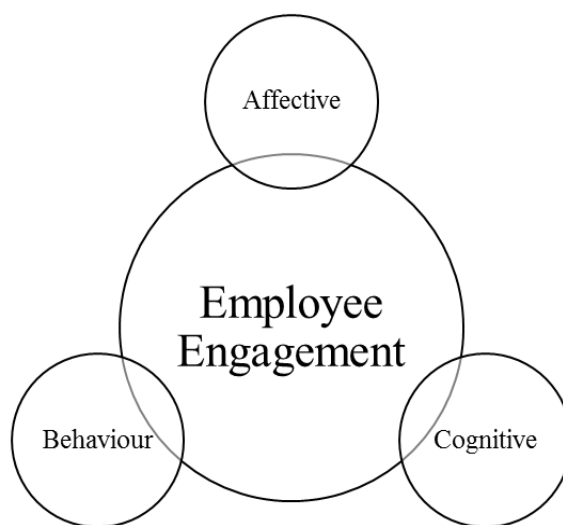


Fig. 1. Multi-Dimensions of Employee Engagement

3 KNOWLEDGE CREATION

In this fast-developing information age, the traditional factors of organizational performance are being replaced by knowledge as the critical factor. Knowledge is the greatest source of organization to attain competitive advantage. However, knowledge is only beneficial when it is integrated into specific problem solving and task performance (Binotto, Hamer, Nakayama & Silveira, 2004). For instance, organizations integrate specialized knowledge in a common task to improve their productivities (Drucker, 1996). There is no unified definition of knowledge. Knowledge is different from information and data when knowledge arise from human interactions and interpretations (Liu, Ahmad, Ahmed & Wu, 2011). In the organization context, knowledge is employees' experience, which can be specified into what employees know about their customers, products, process, success and mistakes (O'Dell & Grayson, 1998); it is a fluid mix of framed experience (Davenport & Prusak, 1998).

Additionally, knowledge was described as an ice-berg in which explicit knowledge can be tangible in the top and tacit knowledge is intangible in the bottom (Sui, Liu, Puteri, & Freida, 2016). According to Nonaka (1999), explicit knowledge is a kind of knowledge that can be systemized in tangible written or oral forms such as procedures, rules, regulations and electronic database which can be easily accessed. Conversely, tacit knowledge refers to "we know more than we can tell", which means the capability of human to know more than they can verbalize (Polany, 1967). Tacit knowledge is hard to communicate (Nelson & Winter, 1982; Nonaka, 1994; Nonaka & Takeuchi, 1997; Polany, 1967) and record (Leroy & Ramanantsoa, 1997). It involves personal values, contextual information, experiences and expertise, as well as learning by doing process (Omar, Mahdil, Liu, & Mahmoud, 2011). Tacit knowledge could be internalized by means of assimilation (Kim, 1993), practice, observation and imitation (Nonaka, 1991; Nonaka & Takeuchi, 1997), moreover, it originates and is applied in the mind of the employees (Davenport & Prusak, 1998).

To Binotto et al. (2004), knowledge is the process that mainly concentrated in knowledge creation and the influence of knowledge creation on engagement and employees' creativity, in order for taking advantage of individual knowledge involving social processes of knowledge creation. Knowledge creation refers to a phenomenon transcending process through combining it with a new phenomenon. Nonaka and Teece (2001) described knowledge creation as "a cycle of self-transcendence process that one transcends the boundary of the old self into a new self through combining with new knowledge". To Marakas (1999), "knowledge creation relates to an organization's capability to innovate new and better ways of working and solutions". To sum up the definitions of knowledge creation, it can be explained that knowledge creation is the outcomes of combining the existing knowledge with new knowledge (Kogut & Zander, 1992). Knowledge creation is important since it hold the two organizational domination goals: generation and application of knowledge (Spender, 1996). Knowledge creation is key to a series of organizational processes attaining competitiveness, including the development of novel product and the evolution of dynamic capability (Brockman & Morgan, 2003). Here, Nonaka and Takeuchi (1997) model theory was used.

4 LINKAGE BETWEEN EMPLOYEE ENGAGEMENT AND KNOWLEDGE CREATION

The effective knowledge creation process consists of three elements, which are SECI model – process of knowledge creation; and *Ba* – facilitators of knowledge creation; as well as knowledge assets – outcomes of knowledge creation (Nonaka & Takeuchi, 1997).

4.1 Process of Knowledge Creation

Knowledge is created by means of interactions between tacit and explicit knowledge of employees within an organization. Knowledge creation processes with four models, according to Nonaka and Takeuchi (1997), are represented in Fig. 2.

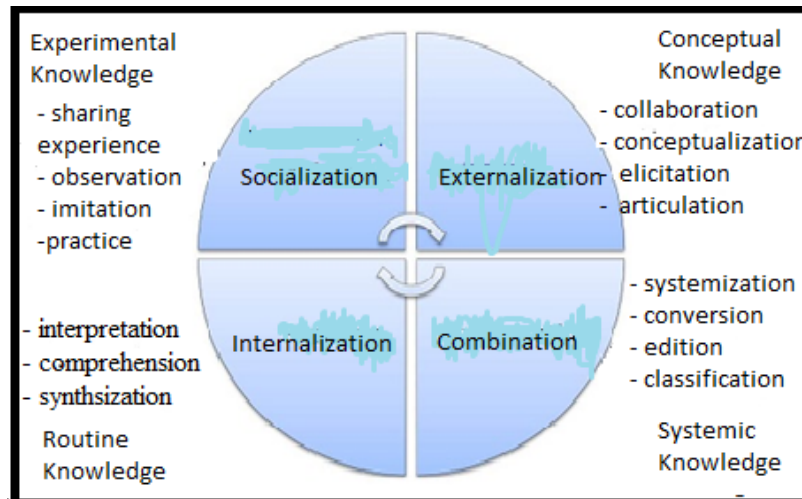


Fig.2. The Process of SECI Model
Adapted from Nonaka & Takeuchi (1997)

Socialisation (tacit to tacit) is the process that convert tacit knowledge into tacit knowledge by means of shared experiences, and this reflects interactions between employees within an organization. Socialisation happens during a traditional apprenticeship, in which the apprentices learn the tacit knowledge they needed for work by sharing hands-on experience, rather than from text books. The apprentices worked with their masters and learned craftsmanship by means of observation, imitation, and practice (Nonaka & Takeuchi, 1995). In this way, organizations gain new knowledge when employees interacting with each other throughout the organization, and this could improve the relationship between employees, thereby enhancing employee engagement (Abrams, Cross, Lesser & Levin, 2003). However, there must be some sort of shared experience present because it is not easy for an employee to project her/himself into another individuals thinking, because of the just transfer of information do not make strong sense when the person is taken away from relevant emotions and specific context where shared experiences are embedded. In this sense, shared context amongst organization members is paramount for sharing accurate knowledge at employees' work to improve employees job satisfaction, thus to enhance employee engagement (Nahapiet & Ghoshal, 1998).

Externalisation (tacit to explicit) presents the process that convert tacit knowledge into explicit knowledge. Externalization process asks for the tacit knowledge is expressed and translated into a comprehensible form that others can easily understand. In this way, employees create something new that has value and may help them in communicating with others and solving problems (Feldman, 1990), employee thus feel job satisfaction and are engaged at work. Externalization is a perfect process because of tacit knowledge (e.g. personal experiences, ideas, beliefs) becomes explicit that expressed by ways of conceptualization, elicitation and articulation, and because of it encourages direct commitment to the creative process (Nonaka & Takeuchi, 1995), it in turn increases highly employee engagement within the organization. In this phase, we can say that knowledge is crystalized. It indicates that employees were engaged to convert the tacit knowledge into new explicit knowledge.

Combination (explicit to explicit) is the process that systemizes knowledge into a knowledge system. New knowledge is created after explicit knowledge is collected from either outside or inside the organization and then combined, edited or processed (Nonaka, Toyama & Konno, 2000). Explicit knowledge is found in established information sources such as documents, e-mail, reports and so on, and is easily documented and distributed. In this sense, this process provides a convenient and easy way for employees to access the specific information and knowledge at work, which in turn enhances the level of contentment a person allocates to their jobs, which is called employee job satisfaction.

Internalization (explicit to tacit) is the process that embodies explicit knowledge into tacit knowledge. This concept is often referred to as learning by doing. Individuals relive other people's experience and create new knowledge from reading documents and relating it to their own experience. When the tacit knowledge bases are internalised they become valuable assets. A new knowledge spiral can be developed when this accumulated individual tacit knowledge is shared with others throughout the organization. The organization strives to learn and innovate in socialization process since this new knowledge is shared. When an organization offers training programs, employees try to create new knowledge by means of internalizing the

tacit knowledge through reading training manuals and documents. Continuous employee training enhances the acquisition of new skills and knowledge in an organization and it empowers employees to feel confident about themselves as well as motivating them to work harder.

Nonaka and Takeuchi (1997) introduced that knowledge creation process involves interaction between the obtained knowledge for solving specific issues based on existing premises, and then the new established premises replace the existing premises. This forms a dynamic spiral. In this way, knowledge accumulated at the individual level is shared to transforming and converting continually, from the individual level to group level, and then to the organizational level, sometimes to the inter-organizational level.

4.2 Ba: Facilitators of Knowledge Creation

To facilitate organizational knowledge creation, it is important to build, maintain and utilize *Ba*, because of it supplies the energy to go through the individual conversion and to move along the knowledge spiral. Based on the Japanese philosopher Kitaro Nishida and Shimizu, *Ba* is here related to a shared context where knowledge is shared, created and utilized. In knowledge creation process, social, cultural and historical contexts provide the foundation for one to interpret information and create meanings. For instance, shared language and shared work background, as well as shared vision and mission help employees in developing better understanding of each other; and provide better opportunities for information and knowledge sharing without any misunderstanding (Aslam, Shahza, Syed & Ramish, 2013). In this way, employees assign high level of contentment to their jobs and their employment, which is called employee job satisfaction (Peters, 2007).

On the other hand, *Ba* refers to a basis of knowledge creating activities, in which dialectic dialogues and practices happen. And it plays a role of the knowledge creation platform by collecting the specific knowledge of an area into a certain time and space and integrates it. Furthermore, the concept of “*Ba*” was defined as dynamic context and it does not necessary to be bound to a certain time and space (Nonaka et al., 2000), including physical space (i.e. discussion room), virtual space (i.e. social network services), and mental space (i.e. shared experience and ideas). Thus, *Ba* is constantly changing, depending on context, time and space, as the contexts of participating members of *Ba* change. *Ba* is a Japanese word meaning place. The closest meaning of *Ba* in English words is environment. Knowledge is more efficient in *Ba*, in a creative environment. This is because, firstly, in this creative environment employee’s capabilities is enhanced through transfer of relevant information and knowledge (Amidon, Formica, Mercier – Laurent & Ulikool, 2005; Davenport, Thomas & Cantrell, 2012); secondly, employees are willing to voice and discusses new ideas and engaged in dialogue about new and better ways of working, thus, *Ba* as a creative environment is critical for improving employee engagement within an organization.

Furthermore, *Ba* is the context shared by people who participate in *Ba* and interact with others, and the context itself develops through self-transcending process to create novel knowledge (Nonaka et al., 2000). Thus, organization members participating in *Ba* must be committed to *Ba* by means of action. Participating members of *Ba* sharing space and time is very important, especially during socialization and externalization process. Thus, a frequent physical communication is crucial to share the context and form a common language among the members, in turn, to improve employee engagement.

4.3 Outcomes of Knowledge Creation

Knowledge assets are the outputs of the knowledge creation process. And it is the organizational paramount resources that indispensable to create values for companies and build sustainable competitive advantage. For instance, trust between organization members is considered as a result of the knowledge creation process, meanwhile it mitigates how *Ba* works as the platform mentioned afore (Nonaka et al., 2000). Moreover, since knowledge assets cannot be readily bought or sold, it has to be established and utilized internally to realize their full value.

The knowledge assets are classified into four groups, which are experimental, conceptual, systemic and routine. Experimental knowledge assets, such as the shared tacit knowledge, are established through shared experience amongst the organization members, and this reflects socialisation process. Conceptual knowledge assets are explicit knowledge that articulated through language, pictures, and signs, and based on the organization members’ interpretations, and this is reflected in externalization model. Systemic knowledge assets are explicit knowledge that is systemised and packaged, for example procedures and codified and packaged information about customers and suppliers, and this embodies combination process. Routine knowledge assets consist of the knowledge that is embedded in the action and practices of the organization, and examples of these assets are organizational policies and organizational routines, and this given an expression of internalization model. The four categories of knowledge assets form the foundation of

the knowledge creating process, and new knowledge assets can be created from existing knowledge assets when managed effectively.

Employees were repeatedly convinced as valuable knowledge assets in an organization since they are key holders of both tacit and explicit knowledge (Li, Brake, Champion, Fuller, Gobel & Hatcher-Busch, 2009; Song & Chermack, 2008). In this sense, managing knowledge equals to managing employees. As mentioned afore, experimental knowledge assets (i.e. shared tacit knowledge) that reflect interactions between employees throughout organization enhance the interpersonal relationships. According to Kahn (1990), interpersonal relationships promote employee engagement. Furthermore, this is given as expression that employees are engaged in their behavioural. Conceptual knowledge assets (i.e. articulated explicit knowledge) that involve providing a way for others easily access to the specific knowledge. In this way, employees feel job satisfaction when they can easily access to the knowledge they needed, and this embodies that employees are engaged in affective aspect. Additionally, systemic knowledge assets (i.e. manuals, documentations) and routine knowledge assets (i.e. organizational culture and policies) are critical determines of employee engagement (Woodruffe, 2005; Rama Devi, 2009). This is because these knowledge allow the employees find the alignment between organizational and individual goals, which is named cognitive engagement.

To sum up, knowledge is a process that concentrates on knowledge creation and the impact of knowledge creation on the motivation and creativity of the employees. Knowledge creation is considered as a phenomenon whereby an employee creates something new (e.g. a work of art, a product, a solution,) that has value (Pir Khaefi, 1999), and may be helpful in communicating with others, entertaining themselves and others, and solving problems, (Feldman, 1990) thereby enhancing employee engagement. Fig.3 presents conception of linkage between knowledge creation and employee engagement.

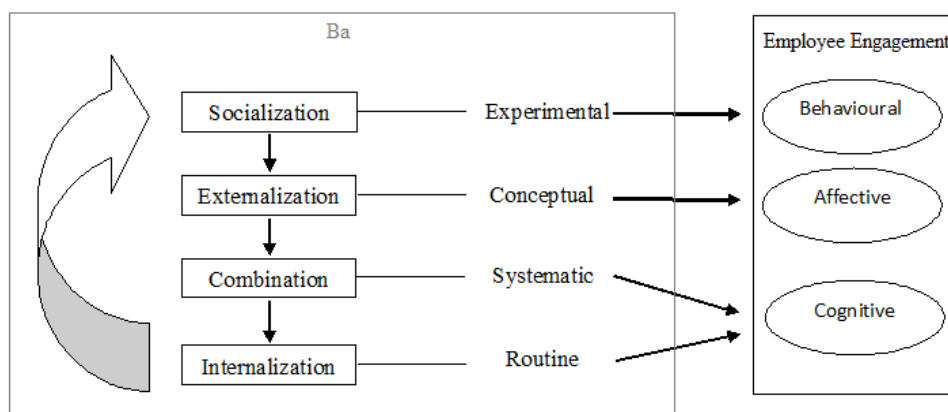


Fig.3. Linkage between Knowledge Creation and Employee Engagement

5 CONCLUSION AND RECOMMENDATION

To conclude, although knowledge creation was implied that could improve level of engagement to attain organizational competitive advantage, whether and how knowledge creation facilitate employee engagement should be further considered. This paper by reviewing literatures on knowledge creation and employee engagement, identified employees could be engaged in knowledge creation process. It proposed a conception that knowledge creation could facilitate employee engagement. It recommended that empirical study could be carried out to verify the proposed theory to aid organization in better practice knowledge creation.

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